

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id **3162** Component **Diesel Engine** Fluid **CHEVRON SUPREME MOTOR OIL 10W40 (--- QTS)**

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

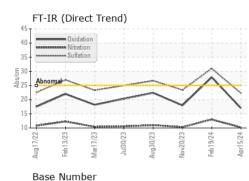
Fluid Condition

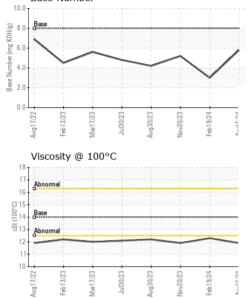
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0906907	WC0906937	WC0863323
Sample Date		Client Info		15 Apr 2024	19 Feb 2024	20 Nov 2023
Machine Age	mls	Client Info		212022	159962	144254
Oil Age	mls	Client Info		189530	116069	116069
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				NORMAL	ABNORMAL	NORMAL
CONTAMINATION	١	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	13	43	15
Chromium	ppm	ASTM D5185m	>20	0	<1	0
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	5	14	6
Lead	ppm	ASTM D5185m	>40	<1	<1	0
Copper	ppm	ASTM D5185m	>330	3	8	4
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		28	22	17
Barium	ppm	ASTM D5185m		0	0	0
Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m		0 2	0 14	0 4
Molybdenum	ppm	ASTM D5185m		2	14	4
Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m		2 <1	14 <1 787 1434	4 <1
Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	990	2 <1 786	14 <1 787	4 <1 805
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		2 <1 786 1354	14 <1 787 1434	4 <1 805 1485
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		2 <1 786 1354 771	14 <1 787 1434 744	4 <1 805 1485 774
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		2 <1 786 1354 771 847	14 <1 787 1434 744 809	4 <1 805 1485 774 886
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	1100 limit/base	2 <1 786 1354 771 847 3530	14 <1 787 1434 744 809 2680	4 <1 805 1485 774 886 2886 kistory2 9
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	1100 limit/base >25	2 <1 786 1354 771 847 3530 current	14 <1 787 1434 744 809 2680 history1 17 5	4 <1 805 1485 774 886 2886 2886 history2 9 2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	1100 limit/base	2 <1 786 1354 771 847 3530 <u>current</u> 10 4 8	14 <1 787 1434 744 809 2680 history1 17	4 <1 805 1485 774 886 2886 kistory2 9
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	1100 limit/base >25	2 <1 786 1354 771 847 3530 current 10 4	14 <1 787 1434 744 809 2680 history1 17 5	4 <1 805 1485 774 886 2886 2886 history2 9 2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1100 limit/base >25 >20	2 <1 786 1354 771 847 3530 current 10 4 8 <1.0 current	14 <1 787 1434 744 809 2680 history1 17 5 18 <1.0 history1	4 <1 805 1485 774 886 2886 2886 bistory2 9 2 9 2 9 <1.0 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D3524	1100 limit/base >25 >20 >5 limit/base >3	2 <1 786 1354 771 847 3530 <u>current</u> 10 4 8 <1.0 <u>current</u> 0.6	14 <1 787 1434 744 809 2680 history1 17 5 18 <1.0 history1 1.2	4 <1 805 1485 774 886 2886 history2 9 2 9 2 9 <1.0 history2 0.5
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm %	ASTM D5185m ASTM D5185m	1100 limit/base >25 >20 >5 limit/base >3	2 <1 786 1354 771 847 3530 <u>current</u> 10 4 8 <1.0 <u>current</u> 0.6 10.2	14 <1 787 1434 744 809 2680 history1 17 5 18 <1.0 history1	4 <1 805 1485 774 886 2886 2886 bistory2 9 2 9 2 9 <1.0 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm	ASTM D5185m ASTM D3524 method *ASTM D7844	1100 limit/base >25 >20 >5 limit/base >3	2 <1 786 1354 771 847 3530 <u>current</u> 10 4 8 <1.0 <u>current</u> 0.6	14 <1 787 1434 744 809 2680 history1 17 5 18 <1.0 history1 1.2	4 <1 805 1485 774 886 2886 history2 9 2 9 2 9 <1.0 history2 0.5
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D3524 method *ASTM D7844	1100 limit/base >25 >20 >5 limit/base >3 >20	2 <1 786 1354 771 847 3530 <u>current</u> 10 4 8 <1.0 <u>current</u> 0.6 10.2	14 <1 787 1434 744 809 2680 <u>history1</u> 17 5 18 <1.0 <u>history1</u> 1.2 1.2 13.0	4 <1 805 1485 774 886 2886 history2 9 2 9 2 9 2 9 (<1.0) history2 0.5 10.3
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D3524 *ASTM D7844 *ASTM D7624	1100 limit/base >25 >20 >5 limit/base >3 >20 >30	2 <1 786 1354 771 847 3530 current 10 4 8 <1.0 current 0.6 10.2 22.3	14 <1 787 1434 744 809 2680 history1 17 5 18 <1.0 history1 1.2 1.2 13.0 31.0	4 <1 805 1485 774 886 2886 2886 history2 9 2 9 <2 9 <1.0 history2 0.5 10.3 23.4

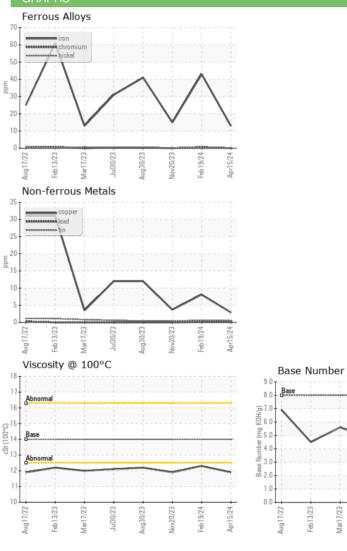


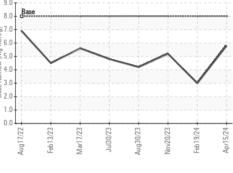
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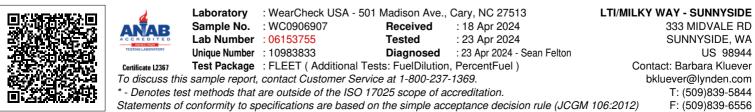




VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.0	11.9	12.3	11.9
СРАРИС						







Contact/Location: Barbara Kluever - LTISUN